

**Programme: New Zealand Grassland Association Conference
 Hosting the New Zealand Society of Animal Production and Agronomy NZ**

Day One: Tuesday

Registration Ascot Park Hotel, Invercargill Monday 4:30-6:30 pm and Tuesday 7:30 am

SESSION 1: Grazing the deep south, Chair Warren King

Sponsor: AgResearch

8:30	<i>Warren King (President NZGA)</i>	Welcome to the Conference
8:35	<i>Chris Smith (Chair LOC)</i>	LOC Chair welcome
8:45	<i>Gary Tong (Mayor SDC)</i>	The Southland District
9:00	<i>Jeff Grant (Thriving Southland)</i>	Thriving Southland: the future
9:15	<i>Ronaldo Vibart</i>	Greenhouse gas emissions from New Zealand sheep and beef farms
9:30	<i>Jacqueline Rowarth</i>	New-generative agriculture based on science, informed by research and honed by New Zealand farmers
9:45	<i>Tricia Johnson</i>	A review of the current sheep industry in New Zealand and opportunities for change

10:00 Morning Tea

CONCURRENT NZGA, NZSAP and Agronomy SESSIONS

10:30	Warren King	NZGA Presidential Address
10:50	SESSION 2A: Grasslands, Chair	Alistair Black
		Sponsor: Grasslanz
10:55	<i>Derrick Moot</i>	AgYields - a national database for collation of past, present and future pasture and crop yield data
11:05	<i>Katherine Tozer</i>	Effect of deferred grazing during late spring and summer on pasture productivity in Waikato and Bay of Plenty
11:15	<i>Gerald Cosgrove</i>	Persistence of perennial ryegrass, tall fescue and cocksfoot following sequential annual sowings: pasture yield, composition and density in three establishment years under cattle grazing in Waikato
11:20	<i>Katherine Tozer</i>	Impact of pasture height and herbage mass on suppression of variegated thistle in North Island East Coast
11:25	<i>Thinzar Myint</i>	Nitrogen effects on species' contributions to grazed pasture mixtures under nitrogen loss and application restrictions
11:30	<i>Jeff Morton</i>	A summary of research results on pasture responses to fertiliser and lime in the South Island Hill and High Country

11:35 FACILITATED DISCUSSION

10:30	Rene Corner-Thomas	NZSAP Presidential Address
10:50	SESSION 2B: Animals, Chair Omar Al-Marashdeh	Sponsor: Beef+Lamb NZ
10:55	<i>Brooke Adams</i>	Seasonal variation in pasture mass was not associated with changes in liveweight, or BCS, in horses
11:05	<i>Sue McCoard</i>	Impact of casein- versus whey-based lamb milk replacers on growth and health of artificially-reared lambs
11:15	<i>Tricia Johnson</i>	Investigating the potential for global positioning satellite data to provide information on ewe behaviour around the time of lambing
11:20	<i>Laura Deeming</i>	Investigating the pattern of lameness prevalence in dairy goats across the first two years of life
11:25	<i>Rhiannon Handcock</i>	Genetic parameters for urination traits and their relationships with production traits of grazing dairy cattle
11:30	<i>Michaela Gibson</i>	Live weight and stature from birth to 15 months of age in pure bred and cross-bred Jersey and Friesian heifers

11:35 FACILITATED DISCUSSION

SESSION 2: CONCURRENT NZGA, NZSAP and Agronomy Sessions (TUESDAY contd)

10:30 **Craig McGill** Agronomy Presidential Address

10:50 SESSION 2C: Crop Physiology

10:55 *Lauren Jones* The impact of different post-harvest residue management practices on a Tall Fescue (*Festuca arundinacea*) seed crop with full straw load retained

11:05 *Colin Eady* Relative *Epichloë* endophyte fungal biomass in ryegrass tillers grown pre and post vernalization

11:15 *Henk van Zyl* Evaluation of tillage practices for maize in a rotation system for market gardening in the Waikato region of New Zealand

11:25 *Emmanuel Chakwizira* Yara N-tester chlorophyll meter calibration: a prequel

11:35 **FACILITATED DISCUSSION**

SESSION 3: CONCURRENT NZGA, NZSAP and Agronomy Sessions

11:50 **SESSION 3A: Legumes, Chair Laura Keenan** **Sponsor: Agricom**

11:55 *Angus Heslop* Response of white clover cultivars to sheep and beef cattle grazing management across three pastoral environments in NZ

12:05 *John Chapman* Legumes are the key to increasing productivity at 'Inverary', a summer moist hill/high country farm in mid-Canterbury

12:15 *Sonya Olykan* Refining foliage sampling protocols for white clover

12:20 *Sonya Olykan* Growth rates and persistence of annual and perennial clovers

12:25 *David Stevens* Can *Lotus pedunculatus* over-sowing in low fertility hill country increase farm resilience?

12:30 *Grace Ehoche* Developing genomic selection for dry matter yield in white clover

12:35 **FACILITATED DISCUSSION**

11:50 **SESSION 3B: Animal Behaviour, Chair Rene Corner-Thomas** **Sponsor: DairyNZ**

11:55 *Lucy Hall* Changes to cow behaviour when transitioning from twice a day to a 3-in-2 milking schedule

12:05 *Sebrena Smalling* Assessing the behaviour of pastoral poultry in an integrated system on a commercial dairy farm

12:15 *Natalie Martin* Temperament of hand-reared beef-cross-dairy cattle does not influence production traits

12:20 *Gavin Sheath* Grazing behaviour of young cattle around faecal pats

12:25 *Tricia Johnson* Preliminary investigations in to genetic variation in distance travelled by young sheep

12:30 *Brooke Adams* Defecation behaviour reduces horse's utilisation of pasture

12:35 **FACILITATED DISCUSSION**

11:50 SESSION 3C: Forage Crop management

11:55 *Wayne Nichol* The benefit of precision planted, pelletised swede seed when sown in cultivated soil in Canterbury and Southland

12:05 *Alexandre Michel* Sowing strategy of winter-sown oats catch crops affects crop development and nitrogen uptake

12:15 *Aung Thant* Productivity and quality of kale, swede, fodder beet and maize in Manawatu

12:25

12:35 **FACILITATED DISCUSSION**

Day One: TUESDAY Field trip Options

12:50 *Board the buses*

Option 1 SESSION 4A: Southern Dairy Hub Field trip

Sponsor: DairyNZ

Option 2 SESSION 4B: Agronomy field trip: Blueberry Country and Auld Distillery (pre-registration required—limited to 60 participants).

5:00 pm Depart field tour venues

5:45 pm **Bill Richardson Transport Museum—Drinks and Light meal**

Sponsor: Ballance Agri-nutrients

7:20 pm **NZ Grassland Trust Awards, Life Membership presentation**

10:00 pm **Finish Day One**

Day Two: WEDNESDAY

8:00 **Keynote Address: NZGA Levy Oration/Living Legends** **Chair: Warren King**

8:35 **SESSION 5: International, Chair Mike Dodd**

Sponsor: Dominion Salt

8:40 *Cameron Ludemann* Forage Value Index for Sheep and Beef

8:50 *Norton Atkins* Outwintering in the UK

9:00 *Mancoba Mangwe* Partial replacement of ryegrass and clover herbage with chicory to alter urination behaviour and soil nitrogen loading of grazing dairy cows

9:10 **SESSION 6: Young Presenters, Chair Rene Corner-Thomas**

Sponsor: Massey University

9:15 *Paige Harris* The effect of feeding fodder beet or kale during winter on growth and behaviour of rising one year old dairy heifers

9:20 *Jacqueline Peers-Adams* An evaluation of the FeedSmart app

9:25 *Charlie Bennett* Can GreenFeed automated emissions monitoring systems measure methane output from young red deer grazing pasture?

9:30 *Yuxin Fu* Effect of concurrent pregnancy on the persistency of lactation in dairy cows milked once a day

9:35 *Swati Jivanji* Genome-wide association study of UV-protectant circumocular pigmentation in Hereford cattle

9:40 **FACILITATED DISCUSSION**

9:50 **MORNING TEA**

Day Two: WEDNESDAY

10:15 **SESSION 7A: Advanced Genetics, Chair Rhiannon Handcock**

Sponsor: Barenbrug **SESSION 7B: A Changing Climate, Chair Jo Kerslake**

Sponsor: Fonterra

10:20 *Michael lee* Genomic evaluations of sheep in New Zealand

Mhairi Sutherland

Do cows with facial eczema feel pain?

10:30 *Brent Barrett* Forecasting the genetic and economic impacts of genomic selection in perennial ryegrass

Andrew Fletcher

Emissions improbable: how inappropriate use of the Global Livestock Environmental assessment model can overestimate the emissions associated with dairy production chains

10:40 *David Scobie* Dominant mutation(s) for low fibre curvature in the wool of sheep

Rogério Chicota

Improving irrigation management on hillslope pastures

10:45 *Michael Lee* Optimising a panel of single nucleotide polymorphisms for genomic prediction in New Zealand sheep

Rogério Chicota

Understanding water losses from irrigated pastures on loess-derived hillslopes

10:50 *Marty Faville* Genomic assessment of white clover and perennial ryegrass genetic resources

Rene Corner-Thomas

A comparison of the lamb performance of Romney and F1 Wiltshire crosses to weaning

10:55 *Marty Faville* An empirical assessment of a genomic breeding strategy in perennial ryegrass

Sam Peterson

The effects of out-of-season breeding on wool production and lamb birth weight

11:00-11:10 FACILITATED DISCUSSION

FACILITATED DISCUSSION

11:15 **SESSION 8A: Wintering, Chair Dawn Dalley**

Sponsor: PGG Wrightson Seeds

SESSION 8B: N in the Environment, Chair Jane Chrystal

Sponsor: Hill Laboratories

11:20 *Matt Canton*

Farming with reduced winter cropping: the risks and practicalities

Sarmini Maheswaran Effects of alternative forages on nitrate leaching under intensive sheep grazing

11:30 *Andrew Dumbleton*

Grasslands development of 'Pallaton' Raphanobrassica

Priscila Simon Ammonia-oxidizing bacteria dynamics affected by plantain under synthetic cattle urine patches

11:40 *Graeme Pitman*

Comparing a covered stand-off pad for on/off grazing during winter with conventional winter grazing

Alistair Black Nitrate effects on N₂ fixation, growth and feed quality of lucerne and perennial lupin

11:45 *Roshean Woods*

The effect of winter fodder beet or kale allocation on behaviour and blood metabolite status of non-lactating dairy cows

Chris Smith Nitrogen leaching losses from fodder beet and kale crops grazed by dairy cows in southern Southland

11:50 *Roshean Woods*

Impact of winter fodder beet or kale allocation on body condition score gain and early lactation performance of dairy cows

Tania Gunn Quantification and mitigation of nitrogen leaching in a maize cropping system

11:55 *Tricia Johnson*

Impact of winter near-maintenance or non-restricted feeding on growth and carcass characteristics of ram lambs

Ronaldo Vibart Sheep dung disappearance from grazed hill country landscapes

12:00 FACILITATED DISCUSSION

FACILITATED DISCUSSION

Day Two: Field Trip

12:50 *Board the buses*

SESSION 9: High performance Sustainable Farming

Sponsor: Beef + Lamb NZ

4:00 pm **Depart field tour venues**

5:30-6:30 **Pre-dinner drinks**

7:00pm

Conference Dinner and Awards evening , Chairs NZGA, NZGT and NZSAP representatives

Sponsor AgResearch

Day Three: THURSDAY

8:30 **Keynote Address: Fifty years of Agronomy**
Sponsor: Agronomy Society

CONCURRENT SESSION

9:05	SESSION 10A: Greenhouse Gases, Chair Jamie Ward Sponsor: NZAGRC	SESSION 10B: Crop Input Management Sponsor: Corteva
9:10	<i>Anna Taylor</i> Winter crop choice and body condition loss change the eco-efficiency of sheep flocks	<i>Tim Brooker</i> Does the timing and rate of magnesium fertilisers affect yield and quality of winter wheat?
9:20	<i>Ronaldo Vibart</i> Evaluation of existing equations to rank methane yields of sheep fed a range of fresh forages and forage crops	<i>Emmanuel Chakwizira</i> Water use efficiency of raphanobrassica and forage rape
9:30	<i>Maria Della Rosa</i> Volatile fatty acids in rumen samples collected before feeding had a stronger relationship than with post-feeding samples with methane production	<i>Fred Milford-Cottam</i> Effects of an organic seed treatment on the growth and yield of maize in the field
9:35	<i>Tricia Johnson</i> Relationship between rumen attributes and meat and carcass traits in sheep divergently selected for methane yield	
9:40	<i>Zac Beechey-Gradwell</i> Progress towards delivering high metabolizable energy perennial ryegrass	<i>Harry Wulff</i> Growth and dry matter accumulation of three hemp (<i>Cannabis sativa</i> L.) cultivars sown on three dates in Canterbury

9:45 **FACILITATED DISCUSSION**

10:00 **Morning Tea**

10:30 **Guest Speaker: Tangiroa Walker—Farm4Life, Chair Jo Kerslake**

11:10	SESSION 11: Farm Systems (Animals), Chair Sam Peterson	Sponsor: PGG Wrightson
11:15	<i>Paul Edwards</i> The fate of calves born on New Zealand dairy farms and farmer attitudes towards producing dairy-beef calves	
11:25	<i>Jamie Ward</i> Is there sire variation in seasonal liveweight gain of rising yearling red deer?	
11:35	<i>Sue McCoard</i> Impact of change in body condition score in mid-late pregnancy in ewes fed a mixed diet on lamb survival and performance	
11:40	<i>Grant Anderson</i> Using a pasture growth model to mitigate satellite estimation saturation	
11:45	<i>Anna Taylor</i> Size of the prize: the value of closing pasture yield gaps on heterogeneous soil types in a dairy farm in Canterbury, New Zealand	
11:50	<i>Racheal Bryant</i> Effect of farm system and milk urea phenotype on milk yield and milk composition of dairy cows in Canterbury	
11:55	<i>Racheal Bryant</i> <i>Effects of substituting autumn N fertiliser with GA on feed supply and milk production</i>	

12:00 **FACILITATED DISCUSSION**

12:10	SESSION 11: Farm Systems (Pastures), Chair Laurie Copland	Sponsor: Ravensdown
12:15	<i>Mike Dodd</i> Quantifying the value proposition for white clover persistence on a New Zealand summer-dry hill-country farm	
12:25	<i>Warren King</i> Variable-rate application of fertiliser – a new tool for farm system and environmental performance	
12:35	<i>Sharon Lucock</i> Factors influencing fertiliser and lime decisions on South Island high- and hill-country farms	
12:40	<i>Victoria Westbrooke</i> Potential profit gains from improving pasture productivity on New Zealand South Island high-country farms	

12:45 **FACILITATED DISCUSSION**

1:00 **Closing and Invite to Rotorua 2022** **NZGA Chair**